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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,604	11/01/2001	Galliano R. Busletta	TEPS-0007	8193

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EXAMINER	
POKER, JENNIFER A	

ART UNIT	PAPER NUMBER
2832	

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/004,604	BUSLETTA ET AL.	
	Examiner	Art Unit	
	Jennifer A. Poker	2832	

-- Th MAILING DATE of this communication appears on th cover sh et with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10 and 21-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 21-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 February 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 10, 2004 has been entered.

General Status

2. Claims 1-10 and 21-30 are pending and are being examined.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 4, 6, 7, 8, and 9 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent Number 4,814,735 to Williamson.

Regarding claims 1, 2, and 9, Williamson discloses windings for magnetic core devices comprising:

(1) A ferrite core having upper and lower E core halves, (Figure 13)

(2) Two interleaved helical coils (relative to upper and lower E core halves), such that when the core halves are mated and secured together, the coils are compressed. (Inherently springable and biased) (Column 6, lines 30-33)

(3) Tab leads (terminal) of the coil positioned to fit printed circuit board receiving slots. (Figure 13) (Column 2, lines 4-7)

Williamson discloses the claimed invention except for stating that the springable winding is biased "to unwind to cause..." However, it has been held that a recitation with respect to the manner in which a claimed structure is to be employed or used does not differentiate the claimed apparatus/structure from a prior art apparatus/structure satisfying the claimed structural limitations. *Ex parte Masham, 2 USPQ2d 1647 (1987)*

Regarding claim 4, it is clearly illustrated in Figure 13 that the magnetic core has an integrally formed base, which is a mount for the legs of the E shaped core.

Regarding claims 6 and 7, Williamson states the windings are formed of flat conductor strips with an insulation coating. (No encapsulation) (Abstract) (Column 2, lines 26-27)

Regarding claim 8 the magnetic device as claimed by Williamson is applicable to various fields employing magnetic core inductor or transformers. (Column 1, lines 5-8)

5. Claims 3, 5, and 10 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent Number 4,814,735 to Williamson.

Regarding claim 3, Williamson discloses the claimed invention including the helically would winding capable of being compressed (inherent that it would have a spring constant), except for the specific range of 750 to 2000 grams/inch. It would have been obvious to one having ordinary skill in the art, at the time the invention was made to incorporate a favorable range for a spring constant,

since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller, 105 USPQ 233.*

Regarding claim 5, Williamson discloses the claimed in ferrite core except for the ferromagnetic material having a composition selected from a group consisting of Cobalt-Iron, Manganese-Zinc, Nickel-Iron, and amorphous Nickel-Phosphide. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a suitable ferrous material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin, 125 USPQ 415.*

Regarding claim 10, Williamson states that the insulated flat metal ribbon comprising the winding has a width greater than the thickness (aspect ration as defined by applicant: width to height), however he does not disclose the precise aspect ratio 1.6:1. It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to find a suitable/workable aspect ratio, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA)*

6. Claims 21-23 and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 4,814,735 to Williamson in view of Japanese Patent Number JP 56012714 A to Takasaki.

Regarding claims 21, 22, 27, Williamson discloses windings for magnetic core devices comprising:

(1) A ferrite core having upper and lower E core halves, (figure 13);

(2) Two interleaved helical coils (relative to upper and lower E core halves), such that when the core halves are mated and secured together, the coils are compressed (inherently springable; column 6, lines 30-33);

(3) Tab leads (terminal) of the coil positioned to fit printed circuit board receiving slots (figure 13; column 2, lines 4-7).

Williamson discloses the claimed invention except for the convex portion of the core half.

Takasaki discloses a transformer having a core comprising convex portions on the part of the bottom portion of the core in order to prevent the separation at a junction of a base plate and the core.

One skilled in the art, at the time the invention was made would have found it obvious to combine the teachings of Williamson with the teachings of Takasaki and incorporate convex portions on the lower part of the core half in order for the core to stand separately or to facilitate attachment to another portion.

Williamson in view of Takasaki discloses the claimed invention except for stating that the springable winding is biased "to unwind to cause..." However, it has been held that a recitation with respect to the manner in which a claimed structure is to be employed or used does not differentiate the claimed apparatus/structure from a prior art apparatus/structure satisfying the claimed structural limitations. *Ex parte Masham, 2 USPQ2d 1647 (1987)*

Regarding claim 23, Williamson further illustrates in Figure 13 that the magnetic core has an integrally formed base, which is a mount for the legs of the E shaped core.

Regarding claim 24, Williamson further illustrates in figure 1 that there is a concave portion located on an upper surface of the core halves.

Regarding claims 25, 26, 29, and 30 Williamson further illustrates in figure 13 that the magnetic core halves have outer legs and inner legs, wherein the 2 windings are placed about the center leg.

Regarding claims 28, Williamson states the windings are formed of flat conductor strips with an insulation coating (no encapsulation) (abstract) (column 2, lines 26-27).

Response to Arguments

7. Applicant's arguments with respect to claims 1-10 and 21-30 have been considered but are moot in view of the new ground(s) of rejection.

Further arguments are addressed below:

(a) Rejections under 35 U.S.C. 112, second paragraph are withdrawn.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Poker whose telephone number is 571-272-1997. The examiner can normally be reached on 5:30-4:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jap
April 15, 2004

LINCOLN DONOVAN
PRIMARY EXAMINER
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